



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

August 31, 2009

MEMORANDUM

To: Lynda Deschambault, USEPA
From: Linda Ketellapper, USEPA
Cc: Stephen Berninger, USEPA
Subject: Update on the PRP Search for Freon Use and Release

The United States Environmental Protection Agency, Region IX (EPA) has tasked its contractor, Science Applications International Corporation (SAIC), with evaluating use and release of chemicals by potential responsible parties (PRPs) at the Omega Chemical Superfund Site ("Site") located at 12504 and 12512 E. Whittier Boulevard in Whittier, California. The term "Site" (as used herein) refers to both the former Omega Chemical property and areal extent (i.e., plume) of contaminated groundwater emanating from that property. This multi-year effort commenced in 2002 and is still in progress. A component of this work has involved searching for potential sources of Freon contamination other than the former Omega Chemical property. Specifically, EPA directed SAIC to research the potential use and release of trichlorofluoromethane (Freon 11) and trichlorotrifluoroethane (Freon 113) (collectively, "Freon" hereafter).

SAIC has extensively researched an array of sources, including hardcopy and electronic files from EPA and a number of local and state agencies; hazardous waste manifests; PRP responses to EPA information request letters; and data submitted by the Omega PRP Organized Group (OPOG).

The extent of the Omega Chemical plume is so large that a comprehensive review of every facility within the plume's borders would be impracticable. Notwithstanding this limitation, SAIC has researched hundreds of facilities and locations based on screening methods designed to effectively maximize results. Currently, SAIC is taking one final look at the PRP search that has been conducted to date for Freon sources in order to identify any previously known or unknown facilities/sites that need to be researched for the first time or need additional review. When sites/facilities are identified, SAIC will undertake further research, as appropriate.

Methodology

For the current task, SAIC is using a combination of the following two screening approaches:

- Search the California Department of Toxic Substances Control (DTSC) Envirostor and California State Regional Water Resources Control Board (RWQCB) GeoTracker databases to identify known and unknown sites; and
- Review in detail results of OPOG research conducted by J. Tatum¹.

1. **Compilation, Mapping and Review of DTSC and RWQCB Sites in Whittier, Santa Fe Springs, and Norwalk, California**

a. **Compilation and Mapping**

A memorandum dated August 18, 2009 explained the compilation and mapping of the DTSC and RWQCB sites in proximity to the Omega Composite Plume Footprint.^{2,3} An index (or list) of the DTSC sites/facilities, an index of the RWQCB sites/facilities and a map showing the location of the DTSC and RWQCB sites/facilities relative to the Omega Composite Plume Footprint were included with this memorandum.

Note: Beginning in 2002, EPA and SAIC identified a geographic area to be researched. The size and shape of this area has evolved over time as more was learned about the Omega plume. A research area established in 2004 ("Phase 1") consisted of the area located north of Telegraph Road. This area is shown on the map in Attachment 1 and is identified as the Phase 1 EDR Research Area. This initial Phase 1 EDR Research Area was used as the basis for the *Environmental Data Resources, Inc.'s DataMap Area Study for the Omega Down Gradient Area* dated January 25, 2005 (2005 EDR Report). EDR's DataMap service compiles environmental data from public records for addresses within a defined geographic area. This Phase 1 area includes the area immediately surrounding the groundwater contamination plume, as interpreted in 2003 for EPA by Western Solutions, Inc. An extended research area (Phase 2) was defined downgradient from the Phase 1 area based upon the more recent groundwater contamination plume as presented in the Operable Unit 2 Remedial Investigation (RI) report (the 2009 RI)⁴. The Phase 2 search area is shown on the map in Attachment 1 as the Phase 2 EDR Research Area. The Phase 2 area includes a buffer of approximately one mile in the sidegradient direction from the edge of the Composite Plume Footprint. SAIC has recently received an EDR study for the Phase 2 area and is in the process of reviewing and evaluating the data.

¹ Freon research provided to EPA in 2007 with list of results contained in Excel file "2007.05.03 Halogen in EDR".

² *Compilation, Mapping and Review of DTSC and RWQCB Sites in Whittier, Santa Fe Springs, and Norwalk, California memorandum* prepared by Linda Ketellapper, USEPA dated 8/18/09.

³ The Composite Plume Footprint represents the outer extent of the combined tetrachloroethylene (PCE), trichloroethylene (TCE), Freon 11, and Freon 113 plume boundaries, as interpreted by CH2M Hill in the 2009 RI.

⁴ The Draft Remedial Investigation Report – Omega Chemical Corporation Superfund Site – Operable Unit 2 – Los Angeles County, California, prepared for EPA by CH2M HILL, March 2009

b. Screening and Review of DTSC and RWQCB Sites

After mapping the list of DTSC/RWQCB sites, SAIC screened the 227 sites listed on the two indexes to determine which sites were located where it seemed unlikely that any releases from that location (or distance) would commingle with the Omega plume. In general, all locations beyond approximately 1 mile from the edge of the Composite Plume Footprint were identified for "no further action" or "NFA". In addition, sites located downgradient of the Composite Plume Footprint were also identified as NFA. In total 82 sites were identified as NFA due to location. SAIC also screened out 4 additional listed "sites" that were not evaluated by SAIC as part of this work effort which included the WDI Superfund Site, the two Omega Properties, and a listing for OPOG. Once the resulting list of 141 sites which were located close enough to the plume footprint to be of potential interest was created, SAIC performed the following:

- Compared the screened list to the list of parties who had received General Notice Letters in the downgradient area, and again reviewed those parties with a focus on Freon use and/or release;
- Compared the screened list to the list of sites previously researched by SAIC to confirm the prior findings for Freon use and/or release, and to identify any sites likely to require additional research;
- Searched the Envirostor and GeoTracker databases for any additional available information and documents, which were then reviewed; and
- For the Phase 1 EDR Research Area Only, reviewed the 2005 EDR Report.

Upon completion of the screening and research, 40 sites/facilities were identified as potential Freon sources located no further than 1 mile from the edge of the Composite Plume Footprint. Note that these are not unique locations since in many cases more than one "site/facility" is listed at a single unique location or address – this is shown on the map in Attachment 1 where multiple Map ID numbers may be assigned to a single location. Of the 40 sites which represent only 20 unique addresses, 24 sites (14 unique addresses) were located within the initial EDR Research Area (Phase 1) and 16 sites (six unique addresses) were located outside the Phase 1 area but within the expanded EDR Research Area (Phase 2).

In summary, of the fourteen (14) Phase 1 sites/facilities identified, preliminary research has been conducted on all of them, 7 have been determined to not be Freon sources based on the information available and no further review is anticipated. For the remaining 7 sites/facilities, research is ongoing including agency document collection, issuance of EPA Information Requests and in some cases, performing additional sampling. For the six (6) Phase 2 sites/facilities identified, preliminary research has been conducted but detailed research and

review has only recently commenced.

2. Review of OPOG Research

On May 3, 2007, OPOG provided EPA with a list of facilities/properties that had been identified as potential users or disposers of Freon in a file named "2007.05.03 Halogen in EDR". EPA tasked SAIC with the thorough review of this file. EPA understands that the list was created by searching OPOG's Omega database for waste code 211 in Santa Fe Springs and Whittier. OPOG also reviewed hardcopy manifests and agency databases. In addition, OPOG reviewed the 2005 EDR Report provided by EPA and searched selected databases identified in the 2005 EDR Report. The results of OPOG's research were reviewed in detail by SAIC and compared on a line-by-line basis to SAIC's findings to determine if any additional PRP sites/addresses should be reviewed in detail.

a. Manifests

In order to replicate, review and expand OPOG's manifest research to include Norwalk, SAIC reviewed available Hazardous Waste Manifests identified from SAIC's Omega Chemical Enforcement Support Tracking System database (a/k/a EPA's Omega Chemical Superfund Site manifest database) by generating a list of manifests for companies that: a) had sent material with a 211 California Title 22 waste code⁵ to the Omega Chemical facility; and b) generated the waste on the manifest within Whittier, Santa Fe Springs, and/or Norwalk, California. A list of manifests was generated by querying the database for any manifest with the waste code of 211 and filtering the resultant list for Santa Fe Springs, Whittier, Norwalk, or any reasonable derivative of these names.

For any resulting 211 manifest listed, it was then determined which of the manifests identified on the spreadsheet were available in EPA's collection of hardcopy manifests. In addition, SAIC identified any additional hardcopies manifests that were available from the same facility/location. Each manifest was then reviewed to determine if Freon was included on the manifest. A total of fifty (50) manifests showed Freon disposal. Next, SAIC determined the location of the manifest's generator address in relation to the Composite Plume Footprint. Generator locations were determined using the Los Angeles County Assessor's website⁶. This review resulted in one previously known site/facility location in the Phase 1 area that required additional review. EPA will send an Information Request to this facility. This review also identified four (4) sites/facilities in the Phase 2 area that require review. This review is in progress.

⁵ California Hazardous Waste Code (CHWC) for halogenated solvents (Chloroform, methyl chloride, perchloroethylene, etc.). This is a broad group of chemicals that includes Freon 11 and Freon 113. The California Hazardous Waste Codes are codified in Cal. Code Regs., tit. 22, div. 4.5, ch. 11, art. 5, Appendix XII.

⁶ <http://assessor.lacounty.gov/extranet/DataMaps/Pais.aspx>

b. List of Facility/Properties

In addition to the manifest research, SAIC also reviewed each facility/property listed in OPOG's file submission. SAIC's review was comprehensive and resulted in one facility being identified in the Phase 1 area that required additional review. The review is complete and determined Freon was detected in groundwater beneath the facility, but that it was not a Freon source.

Summary and Conclusions

Research and data collection on potential Freon sources is ongoing for 8 sites/facilities in Phase 1 and 10 sites/facilities in Phase 2.